

## (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
14 October 2004 (14.10.2004)

PCT

(10) International Publication Number  
**WO 2004/088039 A1**

- (51) International Patent Classification<sup>7</sup>: **D21H 27/30**, B32B 29/00
- (21) International Application Number: PCT/FI2004/000201
- (22) International Filing Date: 1 April 2004 (01.04.2004)
- (25) Filing Language: Finnish
- (26) Publication Language: English
- (30) Priority Data:  
20030491 1 April 2003 (01.04.2003) FI
- (71) Applicant (for all designated States except US): **M-REAL OYJ** [FI/FI]; Revontulentie 6, FI-02100 Espoo (FI).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **AHO, Outi** [FI/DK]; Kastelsvej 17, DK-2100 Copenhagen (DK). **GÄDDA, Lars** [FI/FI]; Erssintie 7 C 9, FI-02750 Espoo (FI). **PELTONEN, Soili** [FI/FI]; Sointulantie 33, FI-05200 Rajamäki (FI). **IMMONEN, Kirsi** [FI/FI]; Ulvilantie 15 B 49, FI-00350 Helsinki (FI). **LIUKKONEN, Sari** [FI/FI]; Kuutamokatu 8 B 19, FI-02210 Espoo (FI). **FUNCK, Heli** [FI/FI]; Nikolsbergantie 64-14, FI-01180 Kalkkiranta (FI). **HILTUNEN, Eero** [FI/FI]; Ulvilantie 17 I 125, FI-00350 Helsinki (FI).
- (74) Agent: **SEPPO LAINE OY**; Itämerenkatu 3 B, FI-00180 Helsinki (FI).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:**  
— with international search report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: MULTILAYER PRODUCT AND METHOD FOR THE PRODUCTION THEREOF

(57) Abstract: Multilayered product and method for the production thereof. The product comprises at least one first layer, which is formed by cellulose or lignocellulosic fibres, and at least one second layer, which is adjacent to the first layer or fitted at a distance therefrom. According to the invention the second layer contains a synthetic, electrically conducting polymer which is mixed with a binder which forms a binder matrix, said second layer being at least partially electrically conductive. By means of the invention it is possible to produce electrically conductive laminates which are suitable for authenticity products.



**WO 2004/088039 A1**